

# REPORT ON WATER TUBE BOILERS.

No. 56262

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Date of writing Report 10<sup>th</sup> Nov. 1948 When handed in at Local Office 10<sup>th</sup> Nov. 1948 Port of CARDIFF  
 No. in Survey held at CARDIFF Date, First Survey 20. 8. 48 Last Survey 3. 11. 1948  
 Reg. Book 13715 on the S.S. "ST JESSICA" (Number of Visits 4) Tons Gross 5420  
Net 3822  
 Built at HOG ISLAND PA. By whom built AMERICAN INTERNATIONAL S.B. CO Yard No. 1491 When built 1920  
 Engines made at SCHENECTADY N.Y. By whom made GENERAL ELECTRIC CO Engine No. 13350 When made 1920  
 Boilers made at BAYONNE N.J. By whom made BABCOCK & WILCOX CO. Boiler No. 902 When made 1920  
 Nominal Horse Power 525 Owners ST. QUENTIN SHIPPING CO. LTD Port belonging to NEWPORT

## WATER TUBE BOILERS—MAIN, AUXILIARY, OR DONKEY.—Manufacturers of Steel MIDVALE, CENTRAL I. ST. CO. & LUKENS ST. CO.

Date of Approval of plan AMERICAN BUREAU No. and Description or Type of Boilers 3 - BABCOCK & WILCOX WATER TUBE Working Pressure 200 LBS Tested by Hydraulic Pressure to 220 LBS Date of Test  
 No. of Certificate ~ Can each boiler be worked separately YES Total Heating Surface of Boilers 8706 SQ FEET  
 Is forced draught fitted NO Area of Fire Grate (coal) in each Boiler OIL FIRED  
 No. and type of burners (oil) in each boiler 5 - COEN OR PRESSURE BURNERS No. and description of safety valves on each boiler 2 @ 3 SPRING LOADED HIGH LIFT. Area of each set of valves per boiler { per rule 8.03 sq as fitted 7.060 } Pressure to which they are adjusted 200 LBS Are they fitted with easing gear YES In case of donkey boilers state whether steam from main boilers can enter the donkey boiler NONE FITTED Smallest distance between boilers 2'-11 1/2" Height of boiler 12'-10"  
 Width and length 14'-6 1/2" & 11'-7 1/2" Steam Drums:—Number in each boiler ONE Inside diameter 42"  
 Thickness of plates 5/8" Range of tensile strength ~ Are drum shell plates welded or flanged NO If fusion welded, state name of welding firm ~ Have all the requirements of the Rules for Class I vessels been complied with ~ Description of riveting:—Circ. seams S. B. LAB long. seams D. R. O. B. S.  
 Diameter of rivet holes in long. seams 29/32" Pitch of rivets 2 3/32" & 4 3/16" Thickness of straps 5/8" Percentage strength of long. joint:—Plate 80% Rivet ~ Diameter of tube holes in drum 4" Pitch of tube holes 4"  
 Percentage strength of shell in way of tubes ~ Steam Drum Heads or Ends:—Range of tensile strength ~ Thickness of plates 5/8" Radius or how stayed DISHED ENDS Size of manhole or handhole 11" x 15" Water Drums:—Number in each boiler ~ Inside diameter ~ Thickness of plates ~ Range of tensile strength ~ Are drum shell plates welded or flanged ~ If fusion welded, state name of welding firm ~ Have all the requirements of the Rules for Class I vessels been complied with ~ Description of riveting:—Circ. seams ~ long. seams ~  
 Diameter of rivet holes in long. seams ~ Pitch of rivets ~ Thickness of straps ~ Percentage strength of long. joint:—Plate ~ Rivet ~ Diameter of tube holes in drum ~ Pitch of tube holes ~  
 Percentage strength of drum shell in way of tubes ~ Water Drum Heads or Ends:—Range of tensile strength ~ Thickness of plates ~ Radius or how stayed ~ Size of manhole or handhole ~  
 Headers or Sections:—Number 24 Material STEEL Thickness 5/8" Tested by hydraulic pressure to 220 LBS  
 Tubes:—Diameter 4 0.2 Thickness 3 BWG Number 264 Steam Dome or Collector:—Description of joint to shell ~ Inside diameter ~ Thickness of shell plates ~ Range of tensile strength ~  
 Description of longitudinal joint ~ If fusion welded, state name of welding firm ~ Have all the requirements for the Rules for Class I vessels been complied with ~ Diameter of rivet holes ~  
 Pitch of rivets ~ Thickness of straps ~ Percentage strength of long. joint ~ plate ~ rivet ~  
 Crown or End Plates:—Range of tensile strength ~ Thickness ~ Radius or how stayed ~  
 SUPERHEATER, Drums or Headers:—Number in each boiler SUPERHEATERS OUT OF USE. Inside diameter ~ STEAM PIPES REMOVED & HEADERS BLANKED OFF.  
 Thickness ~ Material ~ Range of tensile strength ~ Are drum shell plates welded or flanged ~ If fusion welded, state name of welding firm ~ Have all the requirements of the Rules for Class I vessels been complied with ~ Description of riveting:—Circ. seams ~ long. seams ~  
 Diameter of rivet holes in long. seams ~ Pitch of rivets ~ Thickness of straps ~ Percentage strength of long. joint:—Plate ~ Rivet ~ Diameter of tube holes in drum ~ Pitch of tube holes ~ Percentage strength of drum shell in way of tubes ~  
 Drum Heads or Ends:—Thickness ~ Range of tensile strength ~ Radius or how stayed ~ Size of manhole or handhole ~ Number, diameter, and thickness of tubes ~  
 Tested by hydraulic pressure to ~ Date of test ~ Is a safety valve fitted to each section of the superheater which can be shut off from the boiler ~ No. and description of safety valves ~ Area of each set of valves ~ Pressure to which they are adjusted ~ Is easing gear fitted ~

Is easing gear fitted YES  
 Spare Gear. Has the spare gear required by the Rules been supplied YES  
 The foregoing is a correct description,  
 \_\_\_\_\_  
 Manufacturer.

Dates of Survey During progress of work in shops - - Is the approved plan of boiler forwarded herewith ~  
while building During erection on board vessel - - Total No. of visits ~

Is this boiler a duplicate of a previous case YES If so, state vessel's name and report No. "QUIST CORCK" REP. No. 3043

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) THESE BOILERS HAVE BEEN BUILT UNDER THE SURVEY AND CLASS OF AMERICAN BUREAU. THE SCANTLINGS HAVE BEEN VERIFIED AS FAR AS PRACTICABLE AND SO FAR AS CAN BE SEEN THE MATERIAL AND WORKMANSHIP ARE GOOD. THE BOILERS ARE ELIGIBLE IN MY OPINION TO BE CLASSED WITH

RECORD OF B/S. 11/48

Survey Fee (SEE REPT 9) £ ~ : : When applied for 19  
 Travelling Expenses (if any) £ ~ : : When received 19

Date ~  
 Committee's Minute See minute on front

Thomas Donaldson  
 Engineer Surveyor to Lloyd's Register of Shipping.

